Literature Review on Issues of Privacy and Surveillance Affecting Social Behaviour

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Introduction

The purpose of this literature review is to highlight materials related to issues of privacy and surveillance as they affect social behavior. The most common form of surveillance affecting social behavior is the use of cameras or closed-circuit television (CCTV) in public spaces such as car parks, public transit, housing projects, malls, streets, and city or town centres. Nowhere is the use of CCTV more prevalent than in the United Kingdom. Closed-circuit television has also begun to emerge in Australia and South Africa as a means of crime prevention. It is also used in Canada and the United States, but not to the same extent as in the U.K. and Australia.

Much of the literature dealing with surveillance of public space examines the effect that it has on crime and maintaining public order. Limited information is available on the effect that surveillance has on casual, non-criminal behavior. The few articles that deal with this topic state that people are made to feel self-conscious when in-front of a camera. Individuals will go out of their way to appear innocent even if they have nothing to hide. Moreover, surveillance might prompt people to avoid behavior that could be considered deviant by the person monitoring the camera footage. For example, gay or lesbian individuals might fear expressing affection for fear of it being caught on camera and viewed as a lewd act by the observer.

Some of the literature notes how CCTVs are used to exclude others from public space or what has been deemed family space. CCTVs are often used to keep those individuals who are regarded as not fitting into the norm out of family space. This might include the homeless, beggars and street vendors. CCTVs are also used to monitor teens, and in some cases they are used to keep teens out of the mall because they do not fit into the commercial atmosphere. Teens are perceived as "flawed consumers" by the camera operators.

General Findings

Overall, most studies indicate that CCTVs are not an effective means for reducing crime. CCTVs are effective at reducing incidents of burglary and property crime, but they are not effective against personal crime, violent crime or public disorder. A report released by NARCO (National Association for the Care and Resettlement of Offenders) states that CCTVs result in a 5% reduction in crime whereas better street lighting results in a 20% reduction in crime. These figures are fairly consistent throughout most CCTV studies. The effect that CCTVs appears to have on crime usually ranges anywhere from nil to between 3% and 6%. In a few instances, the crime rate actually increased following the installation of cameras. This might be due to the natural oscillation that crime experiences. Crime levels will naturally oscillate and cameras might be installed at a time when levels are low and expected to increase.

Many CCTV evaluations have surveys that compile data on public perceptions of crime, public use of town centres, and public views concerning the proposed installation of cameras. Most people state that they would feel safer with the installation of cameras; however, evidence indicates that people do not feel any safer once the CCTVs are fully operational. Other perceptions that people have regarding the surveillance of public space are noted in the evaluations. For example, although the vast majority of people approve of the use of CCTVs, fears regarding their use are expressed. Many feel that use of CCTVs might lead operators to focus too much attention on certain groups or individuals

while others are ignored. Some people fear that police might prove a little over-zealous in their use of the cameras in order to justify installation. Furthermore, much of the public view the use of CCTVs as a means to "spy on people." Public support of CCTVs is based upon many misconceptions regarding their use to monitor public space.

Some CCTV evaluations interview offenders regarding their attitudes towards the installation of CCTVs and the effect they have or may have on crime. Although many offenders felt that CCTVs were a benefit to the community, a few had a total disregard for their effectiveness at reducing crime. Some past offenders would simply wait for the CCTV to pan in the other direction, before committing their crime. By the time the camera had turned to face in the other direction, the crime had already been committed. As stated in several resources, offenders often come to realize that CCTVs do not greatly impact their risk of being caught. CCTVs simply make them more cautious when they commit their crimes.

Several studies note that crime often declined in the months prior to the installation of cameras. After cameras were fully operational, crime might continue to drop for a period as long as two years. Crime would then begin to increase. As suggested in the literature, this phenomenon is due to publicity or a lack of publicity. The greatest amount of publicity often occurs prior to the installation of the cameras. This is the time when crime levels begin to drop. If CCTV programs are continuously publicized, their effect on crime will remain steady; otherwise crime and criminal behavior will begin to increase as the effect of CCTVs wears off.

Organization

This literature review is divided into two sections. The first section covers the methodology that was used in finding and selecting the literature. Included in the methodology are the search terms that were used to explore either databases, online catalogues or the Internet. Following the search terms is a listing of all the resources that were used such as the names of specific databases, online catalogues, Internet search engines, and various web sites visited. Exact web addresses are provided. The general selection criterion follows the listing of resources. After the methodology section, the literature review section then begins. The literature review section is divided into four sub-categories: Books, chapters, articles, and web sites. Each sub-category has items organized in alphabetical order. PDF or Word documents found on web sites have been printed off and are generally found under the articles' category. Reviews are usually between 200 and 350 words and each is meant to provide a general overview of the material examined. The major points are highlighted along with key statistical data.

Methodology

Search Terms Used

A variety of terms were used while searching the Internet and online databases. These terms are as follows and were used in a variety of combinations:

reality television	camera(s)	"closed-circuit
reality tv	surveillance	television"

CCTV	car park(s)	New Zealand
privacy	garage(s)	South Africa
behavior	housing project	Japan
social behavior	housing estate	London
George Orwell	public transport(ation)	Glasgow
Orwellian	United States	Edinburgh
1984	Canada	Birmingham
"big brother"	United Kingdom	Manchester
panopticon	Great Britain	Scotland
subway	France	Sydney
underground	Australia	Canberra

Resources Used

Databases:

Sociological Abstract	Dow Jones Interactive
Social Sciences Abstracts	PAIS International
PsycINFO	LegalTrac
JSTOR	Web of Science
Criminal Justice Abstracts	AGIS Plus Text
Canadian Newsstand	Index to Canadian Legal Literature
Academic Search Primer	Hein-on-line

Online Catalogues:

University of Alberta Library Catalogue – http://www.library.ualberta.ca
Library of Congress Online Catalogue – http://www.loc.gov
Edmonton Public Library Catalogue – http://www.epl.ca

Online Search Engines:

Google – http://www.google.ca
AlltheWeb – http://www.alltheweb.com
Altavista – http://www.altavista.com
Ask Geeves – http://www.ask.com
Ixquick – http://www.ixquick.com
Librarians Index to the Internet – http://lii.org
Search Adobe PDF Online - http://searchpdf.adobe.com/

Web Sites:

The listing of web sites below is designed to give a synopsis of the major Internet sites visited. It is not intended to be a complete listing.

Government of the United Kingdom -
http://www.open.gov.uk/Home/Homepage/fs/en
Government of Scotland - http://www.scotland.gov.uk/topics/?pageid=1
The European Union On-line - http://europa.eu.int/

The United Nations – http://www.un.org/
Government of Australia - http://www.fed.gov.au/KSP/
Government of South Africa - http://www.gov.za/
All major university web sites in the United Kingdom and Australia
UK Universities and Colleges - http://www.scit.wlv.ac.uk/ukinfo/alpha.html
Australia's Universities - http://www.avcc.edu.au/australias_unis/individual_unis/
BBC News - http://news.bbc.co.uk/
Other major British and Australian newspaper and broadcasting services
The Guardian Unlimited - http://www.guardian.co.uk/
Independent - http://www.independent.co.uk/
Times Online - http://www.timesonline.co.uk
ABC Online - http://www.abc.net.au/
News.com.au - http://www.news.com.au/
The Australian - http://www.theaustralian.news.com.au/
The Sydney Morning Herald - http://www.smh.com.au/
Major American and Canadian news services
CBC – http://www.cbc.ca/
Global - http://www.canada.com/national/globalnational/
The National Post - http://www.nationalpost.com/home/
CBS - http://www.cbs.com/
CNN - http://www.cnn.com/
The New York Times - http://www.nytimes.com/
Personal or organizational web sites

- The New York Surveillance Camera Players - http://www.notbored.org/the-scp.html
- NARCO (National Association for the Care and Resettlement of Offenders) - http://www.nacro.org.uk/
- crime.reduction.gov.uk - http://www.crimereduction.gov.uk/cpindex.htm
- Disinformation - http://www.disinfo.com/site/
- EPIC - Electronic Privacy Information Centre - http://www.epic.org/
- Privacy International - http://www.privacyinternational.org/index.html
- International News Links - http://inkpot.com/news/
- Yahoo Newspapers - http://dir.yahoo.com/News_and_Media/Newspapers/
- Newspapers on World Wide Web - http://www.gt.kth.se/publishing/news.html
- World's Newspapers on the Internet - http://www.actualidad.com/
- Worldwide Newspapers - http://newspapers.start4all.com/
- Reality Television - http://www.uweb.ucsb.edu/~andrewsm/intro.html
- Findarticles.com – http://www.findarticles.com
- Roger Clarke's Home Page - http://www.anu.edu.au/people/Roger.Clarke/
- Urban Eye - http://www.urbaneye.net/results/results.htm
- California Research Bureau - http://www.library.ca.gov/html/statseg2a.cfm

- Surveillance & Society – http://www.surveillance-and-society.org/

Selection Criteria

- Materials were limited to English. However, a small number of French documents from Québec and France were consulted during the initial research phase.
- Materials must have been published from 1980 onward.
- Materials had to be available on the Internet or from either the Edmonton Public Library or the University of Alberta Library.
- If neither library had the desired material, it had to be obtainable through interlibrary-loan or for purchase online.
- Materials generally had to be published in Canada, the United States, the United Kingdom, Australia, New Zealand, South Africa, and France or by international bodies such as the European Union or the United Nations.
- Materials had to deal with issues of privacy, behavior, public space and crime prevention efforts in relation to surveillance and/or closed-circuit television.
- Materials that presented unique opinions or valuable information were included regardless of length. Examples include brief BBC News articles.

Literature Review

Books

Brown, Ben. "CCTV in Town Centres: Three Case Studies" crimereduction.gov.uk. 14, August 2003. <http://www.homeoffice.gov.uk/rds/prgpdfs/fcdps68.pdf>.

This lengthy study which was originally published in book format looks at CCTV in three town centres: New Castle Upon Tyne, Birmingham and King's Lynn. When CCTVs were initially installed, they had a strong deterrent effect on a wide range of crimes; however, over time this effect was diminished and began to fade. Cameras had the greatest effect on property crime whereas the effect on personal crime was less clear as there was little change in the level of assault and wounding. As with many CCTV studies, this one conducted a survey of public opinion regarding the use of cameras in town centres. Most felt safer with the presence of CCTVs, but those who frequented the town centre regularly did not feel any safer. Many individuals felt that the cameras would not have an effect on disorderliness and rowdy behavior as people would engage in these activities anyway. Publicity and the launch of high-profile crime prevention measures are stated to have an effect on crime rates. The remainder of the article examines the three town centres and discusses their unique cases individually. In New Castle Upon Tyne crime reduction occurred prior to installation and continued to drop afterward. Diffusion of benefits occurred in non-CCTV areas. Theft from vehicles increased after installation along with drunken offenses. The number of public disorder incidents remained unchanged. Although the overall effect of CCTVs began to fade over time, there were lasting effects on burglary and criminal damage. In Birmingham robbery decreased before installation and then increased to even higher levels afterward. Wounding and assault rates remained consistent although vehicle thefts declined. Burglaries rose eight months after installation. Those who used the city centre at night were less fearful of

crime and had less faith in the effects of CCTVs. In King's Lynn vehicle crime and burglary were significantly reduced. Wounding and assault began to decrease prior to installation and then began to rise again afterward. It could be that the CCTVs make incidents more known to the police when compared to the pre-CCTV period. The article mentions that if an area is labeled dangerous through the installation of CCTV, it might actually attract crime. The article concludes by stating that CCTVs allow police to coordinate a quick and effective response as well as gather evidence that might be used in an investigation. In addition, although many people felt safer with the presence of cameras about 1/3 of the people had concerns with police or state control. Those who manage and run the system were also a concern for many people.

McCahill, Mike. The Surveillance Web: The Rise of Visual Surveillance in an English City. Willan Publishing, 2002.

This book examines the uses of CCTV in a typical English town. Different settings for the use of CCTV are examined and include shopping malls, streets, office space and housing tenements. It also makes several interesting points as to the use and ultimate function of CCTVs. As the author states, CCTVs are for the moral regulation of town centres, and are meant to purify this space from what are deemed "troublesome others." Troublesome others are defined as the underclass, the homeless and the unemployed. CCTVs are therefore a tool for exclusion as town centres are considered family space. Other social groups are a risk to be policed and not integrated into society or the area. The Surveillance Web also examines problems which CCTVs cause such as focusing too much attention on certain age groups. 88% of all people targeted in one mall were under 30 years of age. Males were targeted more often than females; the ratio was 71% to 29%. 50% of youth who were targeted were done so due to their attire. 55% of those targeted by CCTV were monitored because someone else in the mall had a suspicion and alerted the operator. Targeted personalized surveillance was more likely to result in a hardcopy printout of the individual or group of people being monitored. These pictures were often taken for future reference and are a significant threat to individual privacy. In addition, the author states how users of the mall are treated as a means to an end – this end being consumption. People who disrupt the commercial space are an intrusion and should be excluded. In one mall, no one over the age of 30 was ejected although security might speak with them for improper behavior. When guards were called to deal with teenagers, there was a 50-50 chance of them being asked to leave. The author concludes that CCTVs are not an effective means to control or reduce crime. In addition, while many CCTV schemes are initiated as a means of crime control, they are often used for other purposes. CCTVs allow powerful individuals and organizations to control marginalized groups.

Norris, Clive and Gary Armstrong. The Maximum Surveillance Society: The Rise of CCTV. Berg, 1999.

This book discusses a wide range of topics related to surveillance. Some material within the book does deal with surveillance of public space by cameras or CCTV. The authors note how CCTV operators often focus upon certain groups such as young men or teenagers who make up only 15% of the population. This differs with women over 30 who were almost never viewed or monitored by CCTV operators. Individuals over 30 who were targeted by CCTVs were often done so due to their behavior. Examples of behavior that resulted in them being targeted include drunkenness or public disorder. This differs with young people who were treated as suspicious for simply being young. Behavior did not always play a factor in young people being observed. In addition, the authors state that camera operators do not often look out for victims or people who will be victimized. The focus of many camera operators is on who will offend. The voyeuristic potential for CCTV is noted as voyeuristic motives are said to out number protectionist motives by 5 to 1. The authors make a highly observant point when they state that CCTVs are a tool for injustice by amplifying differences and resulting in discriminatory policing.

Webb, Barry and Gloria Laycock. Reducing Crime on the London Underground: An Evaluation of Three Pilot Prjects. Crime Prevention Unit Paper No. 30, London, Home Office, 1992.

This publication examines initiatives to reduce crime at several stations in the London Underground. CCTV is used in all cases and alongside other measures as a deterrent. Each station is discussed separately with the measures implemented and the overall effect they had on crime. When used in conjunction with other measures, cameras proved highly effective at reducing crime rates in the London Underground of Chaplam Common. Moreover, there was no evidence of displacement. Crime rates began to increase after a period of time which indicates that the effect of the cameras began to decline. Offenders realized that the cameras did not greatly increase their risk of being caught. As in other material on CCTVs, it is suggested that arrests and convictions needed to be publicized to reinforce the success of CCTV. Police also had to be present as offenders realized that staff were unable to make arrests. At Oxford Circus, cameras and other measures did not succeed in reducing crime. A lack of publicity may account for the poor results. In addition, reports of pick pocketing may have occurred at other stations and then been realized while commuters were present at Oxford Circus. It is made clear that CCTV is useful under certain circumstances, but it is not effective in large, crowded areas where surreptitious behavior occurs.

Chapters

Armitage, Rachel, Graham Smyth and Ken Pease. "Burnley CCTV Evaluation" Surveillance of Public Space: CCTV, Street Lighting and Crime Prevention. Criminal Justice Press, 1999. 225 – 249.

The author begins noting that many CCTV evaluations are not carried out by independent evaluators. Additional problems in CCTV evaluations are also identified. A discussion of the Burnley CCTV scheme then follows. Overall, camera areas saw a reduction in crime by one-quarter. Adjoining areas saw a similar decline in crime which indicates diffusion of benefits to the surrounding areas. Drug crimes fell in the area under surveillance; however, drug crime rose in adjoining areas which indicates some displacement. There was a decrease in car crimes and a diffusion of benefits for benefits to surrounding areas. The evaluation states that adding a large number of cameras did not result in a large decrease in crime, the overall decrease in crime remained gradual and then bottomed-out. This chapter then has a discussion of crime during the day and night periods. In the CCTV area, crime peaked between 3pm and 6pm. In the adjacent area it peaked from 6pm to 9pm. There is no evidence to support that CCTVs are more effective at one particular time of day than another. When the evaluation of Burnley CCTV scheme was nearing completion there was an indication that crime in CCTV areas was beginning to increase. CCTVs also helped log where prolific offenders work and thus changed the way police and other authorities work. In addition to property crime, fraud and the handling of stolen goods also began to show a decline. Although both are non-public crimes, it is suggested that disrupting some types of offending may directly or indirectly prevent other types of offending.

Brown, Sheila. "What's the Problem, Girls? CCTV and the Gendering of Public Safety" Surveillance, Closed-Circuit Television and Social Control. 207 – 220.

The author of this chapter, Sheila Brown, examines gender differences between the way men and women perceive the use of CCTVs to reduce crime. Also included is a discussion of how women and men perceive public space differently thus affecting CCTV schemes. As Brown states in the introduction, many believe that women would welcome the installation of CCTVs and have greater feelings of safety once they were operational. Installation would also result in increased use of the town centre by women. As the author clearly remarks, this is not the case. Brown explains how a town centre is considered men's space by women. More men than women use the town centre for leisurely purposes. In addition, both men and women were discouraged from using the town centre because of male behavior. Almost half of all women felt insecure about using taxis and there was no safe form of transportation that would allow women to use the town centre. Male policing also heightens insecurity for those using an area. As a result, the author states that women perceive the town centre as uninhabitable even with the introduction of CCTVs. Data or statistics are also included regarding twelve separate crime/fear related projects from the Middlesborough area between 1991 and 1995.

Ditton, Jason and Emma Short. "Yes, It Works, No, It Doesn't: Comparing the Effects of Open-Street CCTV in Two Adjacent Scottish Town Centres" Surveillance of Public Space: CCTV, Street Lighting and Crime Prevention. Criminal Justice Press, 1999. 201 – 223.

This chapter examines the case of Airdrie and Glasgow and compares the end results of both CCTV schemes initiated in those cities. The author begins by discussing the effect that CCTVs have had in the area of Airdrie and provides statistics on levels of crime before and after installation. A discussion of displacement and diffusion follows near the end of the section. Displacement of crime did take place to the areas surrounding Airdrie. Following this, the CCTV scheme in Glasgow is then discussed. Recorded crime in Glasgow along with the ability to detect crime using cameras is highlighted. Crime statistics are provided. The author concludes his evaluation by suggesting that CCTV appears to have been less successful in Glasgow than in Airdrie. The reasons for the difference are due to the intended use of CCTVs. In Airdrie it began as a response to a specific local crime problem. In Glasgow it began as an attempt to have a positive impact on the city's erroneous image as dangerous. It was hoped that this might lead to more investment in Glasgow. As the author points out, capturing crime on camera only publicizes the fact that it does exist. As a result, the Glasgow scheme was inherently flawed from the start. In addition, Glasgow is much larger than Airdrie and there is a difference in the way people use and view the town centre. In Airdrie you have a town centre which belongs to the community and where many people reside. In Glasgow's case, you have a city centre where only a few people reside. There is detachment on the part of many people who use the town centre. The author also suggests that crime fluctuates regardless of cameras and in the case of Glasgow; they could have been introduced during a time when crime was expected to rise.

Ditton, Jason and Emma Short. "Evaluating Scotland's First Town Centre CCTV Scheme"Surveillance, Closed-Circuit Television and Social Control. 155 – 173.

This chapter examines the city of Airdrie and the results of a CCTV scheme developed for that city. The chapter begins with a discussion of how the CCTV scheme in Airdrie developed due to the efforts of a single police officer. Statistics are provided regarding specific crimes and the overall crime rate. The authors state that crime and offenses fell by 21% in the two years following installation of CCTVs. Areas surrounding Airdrie saw an increase in crime through possible displacement. Crime in the areas around Airdrie increases between 161% and 215%. There is a discussion of how cameras were used for the detection of crime. According to records, detection improved 116% in the two years after CCTVs were installed. Included in the chapter are direct quotations from offenders in the area of Airdrie. Many offenders are aware of the presence of CCTVs. Many also know which parts of the street are visible to cameras and which parts are not. Many offenders still knew how to commit crimes in spite of the presence of the cameras. The authors conclude by summing up the overall effect that CCTVs had on crime. Crimes of dishonesty fell by 48%, but public order crime rose by 133%. The drop in dishonesty is significant since it is not noticeably affected by the presence of CCTVs.

Lyon, David. "Computer Codes and Mobile Bodies" Surveillance as Social Sorting: Privacy, Risk and Digital Discrimination. Routledge, 2003. 13 - 30.

This chapter has a brief discussion of the use of CCTVs in combination with facial recognition technologies in both the United States and England. The discussion includes mention of searchable databases that sort and organize facial features. Facial recognition technologies such as those used in gambling casinos are noted along with growing interest in using this technology to identify terrorists. Privacy issues and growing interest in securing privacy are mentioned along with perceived risks in utilizing CCTV technology and causes for the rise in CCTV use. A need to manage or control growing populations is stated as one major factor leading to the rise in CCTVs and their use. Lower socio-economic groups and women are noted as being accustomed to surveillance in one form or another which might result in more acceptability of being monitored in public space. The article also states that little sociological attention has been given to the effects that repeated and diverse surveillance has on people and their behavior.

Norris, Clive. "From Personal to Digital: CCTV, the Panopticon, and the Technological Mediation of Suspicion and Social Control" Surveillance as Social Sorting: Privacy, Risk and Digital Discrimination. Routledge, 2003. 249 – 281.

Norris begins his discussion by noting how those who view the video footage from a control room are detached and receive only secondhand knowledge about the people they are viewing in-front of a camera. Norris states that this is a form of dehumanization. Intervention by police or some form of security can also be a sign of disorder. In other words, installation of CCTVs can be viewed as a sign of disorder in the area and thus deter people from using or frequenting it. In addition, the information gathered by CCTVs is controllable; this is especially true if the information is stored in digital format. Norris further states that in many small towns in the United Kingdom where CCTV is employed, CCTV operators often know the identities of most of the people they observe. In large urban areas, only 16% of those who were viewed were known by camera operators. Norris notes how the time and manpower required to identify someone from CCTV footage is wasteful. To identify the London mail-bomber, David Copeland, police or investigators had to view 1097 videotapes and an estimated 26,000 hours of video footage. Norris includes in his chapter a discussion of behavior or characteristics that are likely to get the attention of CCTV operators and cause a person to be placed under surveillance. Information overload caused by too many screens may result in overuse of stereotypical categorization and whom to target. Norris' chapter has a discussion of teens and general perceptions and interactions between them and CCTV operators. Teens are said to disrupt the commercial image of a shopping mall; they are perceived as "flawed consumers." CCTVs are therefore a tool of exclusion. This might account for younger people being more opposed to the use of CCTV and noticeably cynical regarding its effect.

Phillips, Coretta. "A Review of CCTV Evaluations: Crime Reduction Effects and Attitudes Towards Its Use" Surveillance of Public Space: CCTV, Street Lighting and Crime Prevention. Criminal Justice Press, 1999. 123 – 155.

This chapter examines a number of CCTV evaluations from the United Kingdom and assesses the overall impact on crime and public order where cameras have been installed. Several relevant points are raised by the author. He states that people might be deterred from using an area because the presence of cameras gives people the perception that the area is too dangerous. Moreover, an increase in crime following the installation of CCTVs may be the result of an increase in detection through the use of cameras. However, if crime appears to be reduced following installation, it might be the result of people feeling that they do not have to report the crime since it has been recorded by a camera. The author notes that effect of CCTVs appears to fade after a period of between 12 and 15 months. In car parks, CCTVs have helped to reduce car theft as well as theft from vehicles and damage to vehicles. They have also been responsible for reducing vandalism on buses and have proven effective in public housing complexes. However, some of the evaluations examined had mixed results where diffusion and displacement are concerned. Personal crime had the same mixed results. In addition, some CCTV schemes had no apparent effect on crime at all. Many offenders are quoted as not being deterred by the presence of cameras. The author concludes by stating that CCTVs have reduced property crime in certain settings where installation has occurred. Where public disorder, personal crime and fear are concerned, the picture is much less clear. CCTVs do not reduce fear nor deter personal crime or public disorder; they do allow for the better deployment of police and security.

Skinns, David. "Diffusion and Displacement: Evaluating the Effectiveness of CCTV" Surveillance, Closed-Circuit Television and Social Control Crime Reduction. 175 – 188.

This chapter deals with the techniques and methodology involved in evaluating the effectiveness of CCTVs. It also examines the CCTV scheme used for the town centre of Redton in the United Kingdom. The results of the CCTV system are discussed. Burglary and criminal damage showed a 25% and 32% reduction following the installation of the cameras. Theft from vehicles also showed a decline that can be attributed to CCTVs. In addition, business community victimization dropped from 89% to 65%. There was evidence for diffusion of benefits to the immediate area where crime dropped by 11%; while outlying townships saw a 31% increase in crime which indicates some displacement. Moreover, where displacement seems to have occurred in the outlying areas, there was a significant increase in all types of crimes. When both diffusion and displacement are taken into account, CCTVs in Redton are said to have had a 6% reduction in crime overall. The author also states that regardless of whether or not crime increases or decreases, establishing a direct connection to the installation of CCTVs is difficult. The chapter concludes with the limitations found in the evaluation strategy of the Redton town centre. Greater in-depth studies are recommended. Other suggestions are made for camera monitors, police and legal personnel where videotape evidence is used.

Talley, Nick. "Evaluating the Effectiveness of CCTV Schemes" Surveillance, Closed-Circuit Television and Social Control. 139 – 153.

This chapter deals with the uses of CCTV scheme evaluations. The author has a discussion of the process through which newly initiated crime reduction methods go through after installation. Upon initial installation, the new crime reduction method is claimed to be highly effective. Following this, the measure is adopted widely just prior to full scale systematic evaluations. Further and further evaluations produce disappointing results and confidence begins to wane in the new crime reduction method. The author's intent is to show a similarity between CCTV evaluations and the evaluation of other crime prevention measures. As noted, circumstances for the installation of CCTVs vary as well as their effectiveness. The author Nick Tilley lists the difficulties in gathering accurate data for proper evaluations. He even states that even when proven that CCTV can reduce crime, it should not be introduced everywhere. Tilley asks the question: "How does CCTV work in differing contexts to generate specific outcomes?" CCTVs work differently in different circumstances. Tilley also suggests that in some instances, evaluation of CCTV schemes is done for some form of aggrandizement. In addition, if success is found, it often leads to unreflective, uncritical installation of CCTVs.

Web Sites

The BBC News web site has a number of short articles on different aspects of CCTV use. So, too, do other online news resources such as The Guardian. Individual articles from the BBC, The Guardian Unlimited and other online news sources are discussed below.

Carter, Helen. "Eye Spy" Guardian Unlimited. 18, August 2003. <http://www.guardian.co.uk/Archive/Article/0,4273,4231169,00.html>.

The article begins with a discussion of CCTVs in Britain and the debate surrounding their use in crime prevention. The overwhelming use of CCTVs in the United Kingdom is obvious in the statistics that are provided. When the article was written in August of 2001, there were an estimated 2.5 million cameras across Britain and the average city-dweller could be expected to be caught on film at least eight times in the course of one day. The city of London had 150,000 cameras in use by police and different businesses and private organizations. The article notes how computers at Bristol University are being used to develop software that could predict assaults before they happen. This is done by studying video footage of criminal body language. The use of CCTVs to exclude and marginalize people from cities and certain areas is mentioned. A study by Roy Coleman, lecturer of criminal justice at Liverpool John Moores University, found that crime actually increased in the city of Glasgow after the installation of cameras. According to Coleman, more CCTVs simply generate more crime and more fear of crime. CCTVs are said to demarcate cities between the rich and the poor. Coleman's comments are followed by police comments concerning the overwhelming public support in favor of cameras. A digital face recognition system employed by Newham's (East

London) CCTV network is noted. Comments are included from Simon Davies, director of Privacy International. He states that cameras change the way we behave and make us more homogeneous. A discussion of cameras types and who is most likely to be observed concludes the article.

"CCTV Blamed for Drug Users' Move." BBC News. **14, August 2003.** <http://news.bbc.co.uk/2/hi/uk_news/england/2116261.stm>.

This brief BBC article discusses the concerns expressed by residents in the suburb of Wiltshire who blame the installation of CCTVs near their homes for an increase in crime. In order to avoid cameras in the area of Sussex Square, drug junkies have moved into their neighborhood where they break into garages and use needles on local doorsteps. When residents confront drug addicts, the junkies hurl abuses at the homeowners. According to the article, when CCTV cameras were placed at the front of houses, it forced the junkies to move to the garages and backyard gardens. One resident is quoted as saying the only solution would be to demolish the garages.

"CCTV 'Fails to Cut Crime and Anxiety'." Guardian Unlimited. **14, August 2003.** <http://www.guardian.co.uk/uk_news/story/0,3604,282423,00.html>.

This Guardian article begins by stating that CCTVs neither reduce crime nor alleviate fears of it. Crime rose in Glasgow by 9% in the year following the installation of cameras. Most Glaswegians also stated that they would feel safer once the cameras were installed. But following one year of operation, most said that they did not feel any safer. In fact, more people said that they would avoid the city centre following the installation CCTVs. The author concludes by stating that the potential benefits of technology can be misleading.

"CCTV 'Not a Crime Deterrent'." BBC News. **14, August 2003.** <http://news.bbc.co.uk/2/hi/uk_news/2192911.stm>.

This BBC article highlights government research which indicates that CCTVs are not as useful as a crime prevention measure as previously thought. Cameras have a noticeable effect on vehicle and property crime such as burglary, but no effect against violent crime. The degree to which CCTVs reduce crime is small and other more effective measures such as street lighting do exist and are far cheaper. Street lighting in crime ridden areas could do a lot to reduce crime according to this article.

"CCTV Out of Focus with Crime." BBC News. **14, August 2003.** <http://news.bbc.co.uk/2/hi/uk_news/394021.stm>.

This BBC article includes an interview with Professor James Ditton who is with the Scottish Centre for Criminology. Professor Ditton is quoted as stating that cameras and their effectiveness have been over-hyped. CCTV has some utility for the police, but their overall benefit does not necessarily justify monitoring all passersby. The article continues

to say that when street surveys are conducted, there are still several individuals who object to the presence of the cameras and being watched in Glasgow. Cameras are also noted to be not cost effective as there is often just one arrest for every forty days. The general ineffectiveness of CCTV is revealed by a lack of tourists and investment in Glasgow.

"CCTV System Dubbed Ineffective." BBC News. 14, August 2003. <http://news.bbc.co.uk/2/hi/uk_news/wales/2334239.stm>.

This online article from the BBC states that the ineffectiveness of CCTV is compounded by the lack of police on the beat. A number of late night disturbances have gone undetected despite the installation of cameras. Shop owners are stated to feel less secure and less safe with the presence of the cameras and the noticeable lack of police. The author concludes that CCTVs are only one weapon in the war against crime and that other possible measures do exist and should be used.

Clark, Roger. "Roger Clark's Home Page" Roger Clark's Web Site. 14, August 2003. <http://www.anu.edu.au/people/Roger.Clarke/>.

Roger Clark is a visiting professor with the Department of Computer Science at the Australian National University. Clark is a strong proponent against many types of electronic/data surveillance and his web site features a number of resources dealing with surveillance and data collection. Much of this information focuses on the Internet, cookies, spam and electronic commerce. However, Clark's web site has limited information on the surveillance of public space using CCTVs. "While You Were Sleeping...Surveillance Technologies Arrived," is an article on the emergence of video surveillance and the ability of police and others to locate and track individuals. Clark concludes by discussing how identification technologies can be used to modify or manipulate the behavior of those who are targeted. Some times of behavior which are encouraged are consumerism and voter turn-out. Behavior repression is also mentioned by Clark, but it is not his intention to discuss behavior modification at length in the article. Another article is "Information Technology and Dataveillance." This work looks at various methods of surveillance and data collection. Although the focus is not on public space and CCTV, it does touch upon many issues of privacy.

"Effect of Closed Circuit Television on Recorded Crime Rates and Public Concern about Crime in Glasgow" The Scottish Office. 18, August 2003. <http://www.scotland.gov.uk/cru/resfinds/crf30-00.htm>.

This study begins with an extensive evaluation of public attitudes towards safety and being watched in the centre of Glasgow. As indicated by the study, there are noticeable differences between the way men and women regard safety as well as the way young and old people view the use of CCTV. The study also indicated that 1/3 of the people surveyed did mind being watched by cameras in spite of positive reassurance concerning their use. In addition, more people accepted being videotaped in the street than in any other area of the city. Another issue among those surveyed concerned who would have

access to the videotapes; police were favored first, and then courts. Interestingly, those who had been victims of crime were slightly less likely to support police viewing the tapes. Lack of support for CCTV by victims is consistent in the studies. Victims were also more supportive of the idea that the general public and media should have access to the video tapes. Victims of crime were significantly less likely to view the use of CCTV as an effective measure against crime than non-victims. The study contains statistics on the crime rate following the installation of cameras as well as a breakdown of specific types of crimes committed. Overall recorded crimes and offenses rose 109% after installation. It is suggested in the article that the crime rate often oscillates and that the cameras were installed when crimes were down. Crimes subsequently rose after installation due to the natural oscillation. The article includes a discussion of those individuals who were often targeted by camera operators. Young men are targeted due to their location, attire and posture. Alcoholics were watched along with beggars because they were thought to present the wrong image of Glasgow. The study concludes by stating that CCTVs do not work the same in all areas. Open-street CCTV works in limited ways.

Lund, Cathy. "Spy Cameras Drive Criminals to Suburbs" Sunday Times. 18, August 2003. <http://www.suntimes.co.za/2001/02/18/news/cape/nct08.htm>.

This article is from the Sunday Times in Cape Town, South Africa and discusses the diffusion of crime as a result of CCTVs. It states that the crackdown on crime in an area of Cape Town through increased policing and extra CCTV cameras has resulted in criminals moving to the adjoining suburbs. Residents in the three communities of Bo-Kaap, Oranjezicht and Tamboerskloof complain that their homes and cars have been broken into by criminals. In addition to property theft and vandalism, personal crime in the form of muggings has also increased in the three communities. Residents express fear and feel as though they have been neglected by police through measures to curb crime in other areas of Cape Town. Police responded to the alleged increase in crime by deploying more officers to the affected suburbs. The manager of the Central City Improvement District (CID), the initiative that led to more CCTV cameras increased policing, is quoted as being interested in aiding affected residents by expanding the CID program to the neighboring suburbs.

Nieto, Marcus. "Public Video Surveillance: Is It an Effective Crime Prevention Tool?" California Research Bureau. 18, August 2003. <http://www.library.ca.gov/CRB/97/05/>.

This article notes public opinion concerning the use of CCTVs. People are said to notice the presence of the cameras and yet show little concern for them. In fact, most people are stated as approving the use of cameras and wanting more installed as it would make them feel safer. The author notes how unmonitored cameras are the least effective crime deterrents and cites convenience stores and banks as good examples. The author concludes by stating that cameras are not an effective deterrent when compared to community policing and other crime prevention strategies.

"Privacy International" Privacy International. 14, August 2003. <http://www.privacyinternational.org/index.html>.

Privacy International is a human rights organization that was founded in 1990 and is concerned with government and private surveillance. The web site features news from around the globe regarding issues of privacy and surveillance. Different issues are highlighted and include cybercrime, ID cards, freedom of information, phone tapping and video surveillance. In addition, online documents from the United Nations, international human rights agreements and other European and international agreements on privacy. Various privacy conferences from Europe, Australia and other regions of the globe are listed on the web site. The Privacy International web site has a variety of resources on issues related to privacy and including the use of CCTV in public space. Privacy International has a CCTV FAQ section which covers a number of topics on the use of CCTVs in crime prevention. Also included in the FAQ is a discussion of whether or not CCTVs can reduce crime. It begins by noting how there are a wealth of glowing reports on the effectiveness of CCTV as a crime prevention method. The discussion continues by noting how not everyone has been convinced of the effectiveness of CCTV, several criminological reports have appeared which discredit the use of cameras and conventional wisdom that surrounds them as a form of deterrent. The FAQ section on CCTVs concludes with a discussion of public opinion. Unlike other surveys which seem to show support in favor or CCTVs, Privacy International states that many people have concern over the cameras and feel that neither the government nor private security firms should be allowed to make decisions on where to install cameras in public space. 72% of people felt that cameras could be abused and used by the wrong people. 39% felt that the people monitoring the video footage could not be trusted to use them only for the public good. 37% of people thought that at some point in the future, cameras would be used by the government to control people. As stated, all of these concerns are at the heart of privacy and the civil liberties dilemma.

Rosen, Jeffrey. "A Cautionary Tale for a New Age of Surveillance" Schzophonia. 14, August 2003. <http://www.schizophonia.com/archives/cctv.htm>.

The author of this article notes several problems and concerns associated with the use of CCTVs. One example is that most cameras in London scan for car thefts and traffic offenders which was not the intended purpose of the CCTVs when installed. In addition, it has been suggested that a database would be constructed in the United Kingdom which would contain the photos of all registered drivers. This would allow for facial recognition in combination with the use of CCTVs. Software is also being developed that would allow cameras to detect and scan for unusual movements among a crowd of people. The author notes that being under surveillance can influence a person's behavior regardless of whether or not they have criminal intent. People feel self-conscious around cameras and will attempt to demonstrate their innocence. Teenagers might make obscene gestures at the cameras as a show of defiance while others are forced into social conformity. Gays are one example. Gays may choose not to display any sign of affection for fear of it being caught on tape and viewed as deviant by the person monitoring the camera. The author concludes by noting how CCTVs are a technology of classification and exclusion.

Furthermore, he also states the British are more accepting of social classifications because there is a view that people should know their place within society.

"Street Cameras Defended Despite Limited Effect Claim." Guardian Unlimited. 14, August 2003. <http://www.guardian.co.uk/uk_news/story/0,3604,746126,00.html>.

This Guardian article discusses the NACRO or National Association for the Care and Resettlement of Offenders report on the use of CCTV at reducing crime. It states that other measures were found to be more effective. CCTV measures in car parks are stated to be effective at reducing crime, but cameras in town centres have little impact on serious or violent crime. Crime is noted to decrease the most just prior to the installation of CCTVs. This decrease also happens to coincide with the highest degree of publicity for the CCTVs. The article then concludes with some statistics on the effect of cameras versus other crime prevention measures. Overall crime reduction was 5% using CCTVs whereas better street lighting resulted in a 20% reduction in crime.

"The New York Surveillance Camera Players" The Surveillance Camera Players. 14, August 2003. <http://www.notbored.org/the-scp.html>.

This unusual web site has been constructed by a group of individuals opposed to the use of cameras in public space. Members of this group and similar groups from around North America and Europe are opposed to the use of CCTV and fear for their privacy. In the case of New York, members protest through performing specially adapted plays in-front of surveillance cameras in the New York area. The existence of this group is an example of how CCTV can affect behavior regardless of whether or not someone has something to hide. As stated in some of the articles reviewed, the presence of surveillance cameras can elicit a reaction. People may desire to mock police or government authority by making obscene gestures or physically attacking cameras. The New York Surveillance Camera Players use "theatre." They are also a bit extreme in their thinking, they distrust all government; however, as stated above, they are not alone in their thinking. Other similar groups exist in the United States and Europe. The web site has information on surveillance in the post-September 11th United States which includes developments in facial recognition technology and new anti-terrorist legislation which may affect privacy. The web site provides a number of resources and links which might be of interest. The web site has information on different types of police cameras and a listing of recent public protests against surveillance cameras. Also found on the site is huge number of links to activist groups, news resources on privacy, facial recognition software, and government legislation from different countries regarding privacy.

"Urban Eye Project." Urban Eye. 14, August 2003. <http://www.urbaneye.net/index.html>.

The Urban Eye Project involves comparative research on the use of CCTVs in European public space and assesses the social and political impact resulting in strategies for regulation. Urban Eye brings together specialists such as criminologist, philosophers,

political scientists, sociologists and urban geographers from seven European countries. The web site has a brief outline of some of the key social and political effects that CCTV has when used in public space. Under the heading "results," a number of working papers can be found which examine the use and effect of CCTV in a number of European cities and countries. Cities or countries studied include London, Oslo, Copenhagen, Britain, Norway, Denmark and Austria. The working papers provide the most thorough and extensive information found on the web site aside from contact information and a listing of the partners involved in the project. The most noteworthy individual papers are discussed separately in the articles' section of this literature review.

Articles

Armitage, Rachel. "To CCTV or Not to CCTV? A Review of Current Research into the Effectiveness of CCTV Systems in Reducing Crime" 18, August 2003. NARCO. <http://www.nacro.org.uk/data/briefings/nacro-2002062800-csps.pdf>.

This article begins by stating that whether or not CCTVs work as a deterrent is often dependent on the context in which they are applied. Systematic assumptions regarding CCTVs and their effectiveness are then listed. CCTV is most effective at reducing property crime such as burglary or vehicle theft. The risk of being caught outweighs the benefits of committing the crime. In addition, alcohol reduces the risk effect caused by CCTVs as judgment becomes impaired. As stated in other studies, the effectiveness of CCTVs is reduced after a period of several months. Publicity must be used to maintain the effectiveness of the cameras. Moreover, publicity of crime prevention measures can be just as effective as the cameras themselves. This is proven by the fact that publicity prior to the installation of cameras can result in a decrease in crime. This article states that monitoring an area is discriminatory and based upon the viewer. Some groups are given more attention, while others may be completely ignored by the viewer. According to this study, CCTVs have a small, but statistically significant reduction in crime of about 3% overall. When used in public transport, cameras had no noticeable effect at reducing crime. In car parks, however, CCTVs resulted in a 45% reduction in crime. Cameras have no effect on violent crime which might account for their lack of effect when used in public transportation. Crimes committed on public transportation tend to be one's involving violence. Cameras also had the least effect on public disorder offenses. It is also suggested that public perceptions and acceptability towards CCTV might change as they did with photo radar. As CCTVs become more commonplace, the public may show a backlash to the use of this technology as it infringes upon their civil liberties.

Benoit, Dupont. "Police Technolophila: Toys for the Boys in Blue" Legaldate. 14.3 (2002): 4 - 5.

This is a brief article which examines the use of the latest technology by police and the problems that might surface dealing with privacy issues. The author states that quite often the latest technological advantage is viewed as the needed cure to reduce and even prevent crime. This is not the case, as technology is not a solution for curing complex

social problems. The author also compares the use of CCTV or cameras in democratic countries with their use in places like Tibet. Technology is said to have appeal to police officers because it gives them access to vast amounts of information which they can control. This is a concern for members of the public. So, too, is the author statement that technology is unlikely to improve police service as criminals are also likely to make use of same technology.

Coleman, Roy and Joe Sim. "'You'll Never Walk Alone': CCTV Surveillance, Order and Neo-Liberal Rule in Liverpool City Centre" British Journal of Sociology. 51.4 (2000): 623 – 639.

The author of this brief article discusses how CCTVs are often part of a regeneration project for city centres. One example is the city of Liverpool in England where cameras were meant to change the city's negative image and cater to the demands made by the business community. CCTVs are only an effective tool when you know who or what you are looking for; otherwise they are not a reliable means to control or reduce crime. The author describes the use and function of CCTVs as a social construction of suspicion: "Construction of a preferred and particular moral order built on the politics of inclusionary respectability and exclusionary otherness." As with other studies, the author notes how certain groups are targeted by CCTVs such as youth, known and potential shoplifters, the homeless, and the licensed and unlicensed street traders. The author further states that the use of cameras is constructed around the idea of empowerment and freedom. CCTVs empower people who are thus free to shop safely. CCTVs aid in creating an idealized community which is family oriented.

Davies, Graham and Sonya Thasen. "Closed-Circuit Television: How Effective and Identification Aid?" British Journal of Psychology. 91.3 (2000): 411 – 426.

This article examines recent attempts to use CCTV as an identification aid. The authors discuss several experiments that were attempted where CCTV was used and observers then tested to see how accurately they could identify those who were monitored. Each experiment is discussed along with the methodology behind the experiment, the procedure used and the end results. In one experiment, the overall accuracy for estimates in height, weight and age are noted and compared. Comparisons are done between color and monochrome screens. This is followed by monitors reporting the principal clothing features of those who were caught on camera. The findings suggest that color has an inconsistent and unpredictable effect upon the observer's eyewitness testimony. Nor did color allow for superior identification of clothing worn. It functioned as an indirect cue in describing appearance after observing people.

Ditton, James. "Crime and the City: Public Attitudes towards Open-Street CCTV in Glasgow" British Journal of Criminology. 40.4 (2000): 692 – 709.

This article provides a number of statistics regarding how people feel towards the use of CCTV in Glasgow. Following the installation of CCTVs in Glasgow, crime increased. People also felt that the police and not the cameras made them feel safer. CCTVs had no effect on the fear people felt towards crime. Statistics are provided on different age

groups and genders. More young people than old people expressed fear about being monitored by cameras. In addition, crime victims are less likely to support the use of CCTVs than non-victims. Victims are also less likely to support the police viewing the tapes when compared to non-victims. Victims are less likely to believe that CCTVs are capable of preventing crime from happening again. Those who visited the town centre felt that cameras were better able to detect crime than police. In Glasgow, only 33% of those surveyed knew about the presence of cameras three months after their installation. Fifteen months later it had only risen to 41%. A lack of knowledge about the presence of cameras means that they fail to provide much of deterrent to offenders. Cameras and their presence must be publicized if they are expected to work to any degree. Following installation fewer women than men were aware of their presence. Young men were more aware than old. Victims were more aware than non-victims. The author deals with the use of questionnaires to survey the public and states that wording can affect responses given regarding CCTVs and their use. The author concludes that CCTVs do not make people feel safer in the end.

Fay, Stephen J. Tough on Crime, Tough of Civil Liberties: Some Negative Aspects of Britain's Wholesale Adoption of CCTV Surveillance During the 1990s" International Review of Law Computers & Technology. 12.2 (1998): 315 – 347.

This article looks at the unusual popularity of CCTVs in the United Kingdom. Some communities that have adopted CCTVs are villages with little or no crime. Crime is not the driving factor prompting communities to accept cameras. For many town councils CCTVs have become fashionable as well as leading to neo-corporatist partnerships between local governments and businesses which combat crime yet ignore civil liberties. It is suggested that CCTVs are part of a policy of containment for the lower classes. Marginalized people are seen as a threat and the use of cameras to exclude these groups from certain areas is a form of victimization. The author also notes how public opinion is based upon incorrect information regarding the use and purpose of CCTVs. He also observes that CCTVs, while they are designed to reduce crime, are often used for trivial or minor offenses. Instances where cameras have been improperly used or hurt individuals are cited. Two people committed suicide after being caught on tape rather than face embarrassment in court. Moreover, taped footage of beach swimmers was made into pornography on one occasion. The author points out how cameras often lack sound so those who are videotaped are further marginalized. Over scrutiny of certain groups is also mentioned.

Glanz, Lorraine and Fatima Nacerodien. "Assessment of Closed Circuit Television Surveillance with Reference to the Benoni Project – Occasional Paper No. 1" Government of South Africa. 14, August 2003. <http://www.gov.za/sss/cctv.htm>.

The Benoni Project was a community initiative in South Africa that was designed to integrate a variety of systems including traffic control, fire and emergency management systems and CCTV. As stated in the study, CCTV was never intended to deal with all

types of crime. Cameras have difficulty picking up surreptitious behavior such as pick pocketing or bag-snatching in large crowds. It is also stated that cameras become less effective over time. The effectiveness of CCTV must be continuously reinforced through such measure as publicity of arrests and the persecution of offenders. CCTVs are said to allow for the better management of resources available to police. 50% of the police officers who would normally patrol the area where the cameras are deployed were moved elsewhere. The benefits to using CCTV in the Benoni project are highlighted early in the evaluation. A police presence can insight a crowd to react in a negative or even confrontational fashion. Officers may use CCTV to first assess a situation and then decide where or not it is safe to deploy police. Statistics on the Benoni project are provided. In general, most of the public surveyed were comfortable with the cameras and felt safer with their presence. A breakdown is provided of the potential mechanisms that might allow CCTVs to have an impact and therefore reduce crime. A discussion of the "bad neighborhood theory" follows. The bad neighborhood theory is where a neighborhood goes from bad to good in terms of crime and disorder. A few modest changes to a bad neighborhood can have a dramatic effect on overall crime. Extra crime reduction measures in a good neighborhood tend to have no effect. Much of the article includes mention of other CCTV projects in the United Kingdom.

Goodwim, Vanessa. "Evaluation of the Devonport CCTV Scheme" Department of Police and Public Safety: Tasmania Police. 14, August 2003. <http://www.police.tas.gov.au/police/police2001.nsf/W/Resources/SODG-5ED95A/?Open>.

This article examines the use of CCTV in the town of Devonport, Tasmania, Australia. It is unique in that very few evaluations of CCTV schemes have taken place in Australia. As a result, there is a lack of data on the overall effectiveness of CCTV in Australia. The article begins by first examining public attitudes towards the use of Closed-Circuit television. A survey was conducted to find out if people were aware of the CCTVs and whether or not they felt safe using or frequenting the centre of Devonport. Public perceptions of CCTVs are noted to be based on limited or inaccurate knowledge. Interviews were also conducted with the volunteers who monitored the cameras. The authors note how the young people of Devonport have very limited options when it comes to socializing. This has had an effect on their behavior in the town. The article examines the effect of CCTVs street by street. The number of recorded crimes and the overall effect for each street are noted. As the article suggests, there is evidence of displacement of crime to nearby areas as crime rates have noticeably risen. In addition, CCTVs might be the target of vandalism as people deliberately try to mock their effectiveness. Overall, the evaluation finds that cameras failed to reduce crime as the number of crimes reported to police did not decrease. Burglaries may have been reduced, but injury to persons doubled following the period after installation. The findings are consistent with studies conducted on the use and effectiveness of CCTV in the United Kingdom.

Graham, Stephen, John Brooks and Dan Heery. "Towns on the Television: Closed Circuit TV Surveillance in British Towns and Cities" GURU Publications. 14, August 2003. <http://www.ncl.ac.uk/guru/Working%20Papers/EWP%2017.pdf>.

This article begins by stating that perception of crime and fear of crime drive public support for CCTVs, not actual crime rates. Using cameras to reduce crime and improve safety has a "feel-good" factor and is viewed as a public good. A discussion of public opinion is included. Although fewer women than men are concerned for their civil liberties where CCTVs are concerned, many young women doubt the effectiveness of cameras to prevent physical and sexual assaults when compared to other crime prevention methods. One instance is mentioned where the installation of CCTVs had a negative reaction among the local community. The reasons for this were fewer police and an apparent erosion of trust between the community and the police. The cameras were viewed as "affluent protectionism." People who are perceived as not belonging in a certain area are monitored and harassed. A discussion of public space as democratic space follows. The author states how commercial interests often dominate what occurs in public space. In addition, the author states that CCTVs may breed suspicion and result in greater social fragmentation. More alienation from the community can lead to an increase in crime or deviant behavior. The end result is fortressed commercial ghettos where an individual gains access by arbitrary visual consent.

Gray, Mitchell. Urban Surveillance and Panaopticism: Will We Recognize the Facial Recognition Society? Surveillance and Society. 1.3 (2003): 314 – 330.

This article examines the use of facial recognition technology when used along side cameras or CCTV. As stated in the abstract, facial recognition technology has increased alongside insecurities regarding urban or public space. The ability to link databases of human images together with automated digital recognition systems presents a serious threat to individual privacy. Current trends in CCTV use are noted. The author is also clear that the use of CCTV has a potential impact upon non-criminal behavior. If an area is monitored, there might be less incentive to become involved with someone in distress as passersbys believe it best to let experts deal with the situation. Moreover, cameras are said to affect our quality of life: "To be watched at all times, especially when doing nothing seriously wrong, is to be affected with a creepy feeling...It is the pervasive, inescapable feeling of being unfree." Cameras also lead to a disciplinary influence. The installation of CCTVs in public space abolishes the potential for deviance and internalizes the power of surveillance. The power of surveillance is extended through someone, not just over someone. This leads to habitual anticipatory conformity. There is also no assurance that surveillance information will not fall into the wrong hands and be abused. Facial recognition technology amplifies the potential for abuse. Another problem with the use of CCTV is the distancing between the action taking place and what the monitor interprets. The article mentions the incident in September 2002 where Madelyne Gorman Toogood was caught on a department store video camera spanking her child in the parking lot. Only one piece of information was given to the public, Toogood hit her child. The context of her disciplining her child was completely lost or absent. As a result,

Toogood was labeled an unsuitable parent and even a child abuser. The author has a discussion of women and why they do not feel any safer when CCTVs are installed. Women's fears are not reduced because the CCTV monitor is a stranger. Women have been taught to view the "invisible observer" as a threat. The article concludes by examining how privacy can be balanced with security.

Honess, Terry and Elizabeth Charman. "Closed Circuit Television in Public Places: Its Acceptability and Perceived Effectiveness" crimereduction.gov.uk. 14, August 2003. <http://www.homeoffice.gov.uk/rds/prgpdfs/fcpu35.pdf>.

This article opens by stating that many people are aware of CCTV in banks, shops and building societies, but few are aware of their presence in subways or housing projects. Installation of cameras in the banks or shops has had a higher profile. As with other studies, this one has conducted a survey regarding the public's opinions towards the use of cameras in public space. More men than women are aware of the presence of CCTVs. In addition, more men than women are concerned for their privacy and civil liberties when CCTVs are used in public space. Additional concerns which the public have towards the use of CCTVs are listed. These include fears that police may look for incidents to justify their installation; CCTVs might be used in a covert manner; and CCTV evidence might appear misleading to the person observing. Some of those surveyed felt that police control of the cameras might lead to a police state. Others felt that anyone besides the police monitoring the CCTVs might lead to possible abuse of the cameras and video footage. Furthermore, 41% of respondents stated or felt that cameras were used "to spy on people." Using the cameras for entertainment purposes was another fear that some respondents had. One respondent even stated that a person's quality of life was affected by the presence of cameras. Public misconceptions regarding the use of CCTVs are noted. Many respondents thought that CCTVs were to "record happenings" within a general area. Few could identify more specific uses of cameras. Additional statistics are provided on the breakdown of age and gender issues where CCTVs are concerned. Many respondents felt that cameras were acceptable in places like shopping centres, but not in places of entertainment such as pubs, restaurants, cinemas and residential areas. Public concern existed over who would have access to the video tapes. The highest endorsements were for the police, followed by magistrates and then the courts. Tape retention was another concern expressed by members of the public.

Koskela, Hille. "'Cam Era' – The Contemporary Urban Panopticon." Surveillance & Society. 19, August 2003. <http://www.surveillance-and-society.org/>.

This article looks at how space is defined in terms of social power relations. In addition, the abstract states that power creates a particular kind of space. CCTVs extend this power electronically. The article is based to some extent on the views of Michel Foucault and his theories regarding surveillance and power. Foucault's views are based upon those of Jeremy Bentham who designed the Panopticon – a method of surveillance for prisoners where their every move was monitored from a central tower. Those who monitored the prisoners remained virtually unseen. The author begins by discussing how some researchers have linked Foucault's thought with the surveillance that occurs in cities. City

surveillance can also link knowledge, power and space. Through surveillance "people are controlled, categorized, disciplined and normalized without any particular reason." The author has a discussion of public and semi-public space and those which are often surveyed and those which are not. Examples of public space and semi-public which are not often surveyed include most parks and urban forests, some small shops, some schools and churches, and most restaurants. The author then has a discussion as space as a form of power and visibility over that space as power. Prejudice may result from power over space. Also important, according to the author, is not to allow the person being watched to know when he or she is being watched. Watching might be sporadic, but the threat of being watched does not diminish. Under these conditions, space becomes "stealthy and slippery." Surveillance becomes a threat to the individual and affects their behavior. An internalization of control emerges within the individual and the power of the observer is extended further. The author concludes by stating that urban space is and will always remain less knowable and less controllable in comparison to a restricted panoptic space (a prison for example).

McCahill, Michael and Clive Norris. "CCTV in London (Working Paper No. 6)" Urban Eye. 14, August 2003. <http://www.urbaneye.net/results/ue_wp6.pdf>.

This article has a thorough examination of the CCTV in London and the surrounding communities. The introduction has a discussion of different CCTV schemes or programs found throughout London and the funding they receive. The first section of the article notes the various locations where cameras have been used in the city of London. They include the railway and/or the London Underground, major thoroughfares across the city, airports, sports stadiums, cultural or tourist attractions and police use in cells and prisons. Under major thoroughfares, a brief discussion of the Trafficmaster system can be found. Trafficmaster is a surveillance system which covers all major roads in the capital and encompasses 8,000 miles of U.K. road. The system was recently expanded where a network of cameras was linked to an automatic number plate recognition system. Numberplate images are stored and checked with a database to see if a 5 pound fee has been paid in order to drive into central London between the hours of 7am and 6:30pm. The next section has a discussion of CCTV in the London borough of Wandsworth. All locations in Wandsworth which possess CCTV are listed as well as which cameras are monitored and whether or not the monitoring occurs on a regular basis. Statistics are provided. Interestingly, the next section is a visitor's scenario. Two people are described as arriving at Heathrow Airport and what follows is a discussion of how often they are captured on camera while exploring the city of London. The conclusion deals with the extent of CCTV coverage, the legality and technological sophistication of surveillance cameras. No discussion of the effectiveness of CCTVs is given.

McCahill, Michael and Clive Norris. "CCTV in Britain (Working Paper No. 3)" Urban Eye. 14, August 2003. <http://www.urbaneye.net/results/ue_wp3.pdf>.

This article begins with extensive background information on Great Britain. Age, gender, ethnicity and socio-economics information are provided to the reader. What follows the introduction is a section on the early history of CCTV in the Great Britain from 1960 to

1992. The authors note how CCTV in its early stages was common in private space; it would not be until the 1990s that CCTV became widespread in public space. There was a gradual diffusion of the technology until CCTV became the most significant crime reduction strategy in Britain. The politics behind the rise of CCTV and crime reduction measures are highlighted. The next section discusses the evaluation of CCTV systems and notes how the widespread installation of cameras was not based upon firm and supportive research. What little research that has been done since have had mixed results and are "quasi experimental" evaluations. The findings of several evaluations are discussed with the authors questioning whether or not CCTVs are effective. Their conclusions are that the effects of CCTV are neither universal nor consistent. The section which follows examines current issues and developments in CCTVs. Some issues listed are the costs of monitoring, retrospective searching of video footage, and the prospects of digitization. The article contains a section on CCTV in the news. The authors note how the mass media not only shapes opinion, but reduces "complex issues to common sense simplicity:" "spy cameras to catch vandals" or "CCTV cuts crime on estate by 45%." The articles states that many issues surrounding CCTVs fit into what journalist consider to be newsworthy. In the United Kingdom, the journalists personalize the story by focusing on victims and noting how the offender might have been caught on tape. Everyday stories that would not find much publicity are reshaped in relation to CCTVs and thus given more news value. This influences public perceptions. The further importance of incorporating the media when CCTV schemes are initiated is highlighted. A list of quoted sources in CCTV stories is given. The types of CCTV stories found in four English newspapers are also listed and broken down. A lengthy discussion is given on the use of speed cameras. Their effectiveness along with how much they infringe upon civil liberties is argued. The legal framework surrounding the use of CCTVs concludes the article.

"Prec iS: No. 87 – Evaluation of CCTV Security System at Hutchesontown Multi-storey Blocks" Scottish Homes Publications. 18, August 2003. <http://www.scot-homes.gov.uk/pdfs/pubs/50.pdf>.

This is an evaluation of a CCTV security system that was installed by Scottish Homes as part of the upgrading of the 24-storey blocks of flats at Hutchesontown, Glasgow. The evaluation of the CCTV system covers phase one which resulted in the installation of cameras which cover the external areas around the blocks, the ground floor entrance areas, and lift cars (elevators) within the blocks. Interviews were conducted with the tenants. Over 90% knew that there were cameras, but only 5% felt that their privacy was being affected. 85% felt that crime had been deterred externally and 89% felt that it had been deterred internally. Crime in the area had decreased, but there appeared to be some displacement. A 73% reduction occurred in drug related offences, but this cannot be attributed to the CCTV system. The remainder of the evaluation has information on Scottish Homes, how the evaluation was conducted, questions that were asked of the tenants and how their response broke down by percentage. Police views and recommendations conclude the brief article. So, too, are the thoughts of the security staff who felt that the system had reduced anti-social and criminal activity. Recommendations

include extending the coverage of the system to the refuse chutes and pruning trees and shrubs to allow the cameras full view of the exterior.

Sarno, Chris, Michael Hough and Marjorie Bulos. "Developing a Picture of CCTV in Southwark Town Centres: Final Report" SaferSouthwark Partnership. 14, August 2003. <http://www.safersouthwark.org.uk/>.

This is an extensive evaluation of the CCTV system in the London borough of Southwark as several schemes in the area are analyzed and discussed in great detail. Each scheme is discussed separately with the results noted. Overall, the recorded crime rate fell between 10% and 12% when compared to pre-CCTV levels. The crimes that were most affected by the installation of CCTV were burglary, criminal damage and street and vehicle crime. Statistics for each of the four areas that had CCTV schemes are provided in the evaluation. Drops in the crime rate differed in each of the four boroughs discussed. As with many studies, this one includes surveys which report public opinions towards the use of CCTVs. 55% of those who were surveyed thought that crime had fallen in the area and 90% said that they felt safer once the cameras had been installed. About half the same amount said that they felt safer during the night. 90% also felt that CCTVs helped to catch criminals. Difference in opinion between age groups and gender are noted. Younger people were more skeptical than older people when it came to the effectiveness of CCTVs. Aside from surveying members of the general public, the article also includes opinion from business owners in the area. The author is correct in noting the role that alcohol and peer pressure in influencing people's behavior in front of the camera. Social gatherings in bars or restaurants often involved the consumption of alcohol. Added to this is the effect of peer pressure and preying upon those who are perceived as "out of group members." Provocative and violent behavior may actually be fueled by the presence of CCTVs where people may want to attract police attention. There was evidence of both diffusion and displacement to the surrounding areas. Reduction of crime in the buffer zone was equal to or greater than the CCTV areas. The study states that it is difficult to attribute the crime reductions to the installation of CCTVs. The reduction in crime was more likely due to an overall downward trend where CCTVs played a minor role. Detections through CCTV were low and reduction in crime was attributed to other measures.

Short, Emma and Jason Ditton. "Seen and Now Heard: Talking to the Targets of Open Street CCTV" British Journal of Criminology. 38.3 (1999): 404 – 427.

This article interviews offenders and discusses their views and attitudes towards the use of CCTVs when used to attempt to reduce or deter crime. The article states that burglary and car crime where the two areas of criminal activity that were most affected by the use of CCTV. Almost half of all offenders had heard about the cameras from newspapers. Some actually went down to the police station to see the monitors when they were first installed. A few were aware that cameras had blind spots. Some offenders were noted as being perceptive and realized that the use of CCTV would affect different crimes in different ways. It was also suggested that cameras were used only for petty crimes and proved poor at dealing with public order victimization. Some offenders who were caught

on tape were not persuaded to plead guilty in court. Moreover, it was suggested that drunkenness and anger did not affect their behavior in-front of the cameras. Drunkenness results in poor judgment and a lack of concern where cameras are involved. 8 of the 30 offenders spoken to said that CCTV had no effect on their offending and noted that you could remain out of view of the cameras. Although some offenders stated that while cameras affected their behavior, it simply made them more cautious when they did offend. Some would time how long it takes for a camera to look down one street and then another. While the camera was looking the other way, the offender would commit his or her crime and be gone before the camera looked back the other way. This article states that people may become desensitized to the presence of cameras because police are perceived as absent and therefore inactive.

Tilley, Nick. "Understanding Car Parks, Crime and CCTV: Evaluation Lessons from Safer Cities" Police Research Group. 18, August 2003. <http://www.homeoffice.gov.uk/rds/prgpdfs/fcpu42.pdf>.

This article begins by examining mechanisms introduced by the presence of CCTVs that affect the occurrence of car theft. The author Nick Tilley then examines the CCTV schemes used by different communities in the United Kingdom to monitor car parks. Statistics are listed for each community regarding various forms of car crime. Overall theft of vehicles and theft from vehicles were reduced the most by the presence of CCTVs. Damage to vehicles was also reduced but not by the same amount. Tilley also states that most crimes in car parks occurred before 8pm. Schemes that employ a variety of methods designed to prevent crime are said to work best alongside the use of CCTV.

Welsh, Brandon C. and David P. Farrington. "Crime Prevention Effects of Closed Circuit Television: A Systematic Review" Home Office Research. 18, August 2003. <http://www.homeoffice.gov.uk/rds/pdfs2/hors252.pdf>.

This article examines several other CCTV evaluations and sums up their findings. It examines the use of CCTV in town centres, public transportation and car parks. In thirteen town centre studies, five noted that CCTVs had an effect on crime. Three had an undesirable effect where crime actually increased. The remaining five cases had null or no clear effect on crime. Diffusion of benefits and displacement of crime varied from one town centre to another. CCTVs used in public transportation resulted in conflicting evidence with regard to their effectiveness. Two had a desirable effect and helped to reduce incidents of crime, one was reported to have had no effect and the other had an undesirable effect where crime increased. In car parks, five CCTV programs had a desirable effect on crime and one had an uncertain effect. This study reports that overall, CCTVs do have a reduction on crime; however, the reduction is limited to 4%. CCTVs were reported to have no effect on violent crime, but they did have an effect on vehicle crime. City centre and public housing CCTVs had a negligible reduction on crime of about 2%. In conclusion it is stated that CCTVs are most effective in car parks where they are often used alongside other crime prevention measures.

Welsh, Brandon C. and David Farrington. "Effects of Closed Circuit Television on Crime" The Annals of the American Academy of Political Science and Social Science. 587 (2003):110 – 135.

The authors state that CCTVs may cause crime statistics to increase as cameras boost the number of crimes reported to police and recorded by police. However, CCTVs may also give people a false sense of security and thus cause them to stop taking precautions and lead to more crimes being committed. The authors state that while CCTVs had a significant and desirable effect on crime, the overall reduction in crime was 4%. The article examines city centre and public housing evaluations of CCTV schemes. In both cases, the results were mixed regarding the effectiveness of CCTVs to reduce crime. Crime either increased or there was no noticeable effect. As with other articles, the authors state that cameras are most effective in car parks.

Wiecek, Carsten & Ann Rudinow Saetnan. "Restrictive? Permissive? The Contradictory Framing of Video Surveillance in Norway and Denmark (Working Paper No. 4)" Urban Eye. 14, August 2003. <http://www.urbaneye.net/results/ue_wp4.pdf>.

This article examines the use of CCTV in the two countries of Norway and Denmark. The main focus of the study is to address the legal framework surrounding the surveillance of public space in the two Scandinavian countries. Each country is compared and contrasted. This comparison includes regulations towards CCTV use. Also considered in the article is the public debate regarding CCTV installation in major Norwegian and Danish cities. The authors believe that public video surveillance is more restrictive in the country of Denmark when compared to Norway. The study begins by introducing general information on the countries of Norway and Denmark. The general information is followed by a very brief discussion of Scandinavian and European Union legislation regarding the use of CCTV and public video surveillance. The next section deals with CCTV use in both countries based upon written sources such as newspaper articles and statistics s and includes a discussion of the history of CCTV use and its growth in Norway and Denmark. The third section is a lengthy dialogue on the legal framework surrounding video surveillance practices in Norway and Denmark. Statistics are provided for Norway concerning who is targeted by CCTV surveillance, where this surveillance occurs, by whom and how it is carried out. Statistics are also provided on the geographical distribution of CCTV in Norway city by city. The fourth section of the study is a public discourse using opinion polls. In Dagbladet Norway, 66% of respondents favored the police conducting video surveillance. 25% were opposed and 9% were unsure. Another Norwegian poll examined public opinion towards video surveillance in specific locations: railway station, post office, taxi, and the refuse area in a building complex. 68% felt "very little discomfort" about being video taped in the given areas. 26% felt "fairly little discomfort, and 6% felt "very uncomfortable." A Danish opinion poll follows: banks - 93% positive, gas stations – 90% positive, railway stations – 88% positive, and shops – 78% positive. Several locations are given where respondents were not favorable towards the use of surveillance: changing rooms – 81% negative, work – 66% negative, public toilets – 66% negative, and home, road or

apartment building stairwell – 61% negative. A section dealing with the media and its role in possibly shaping public opinion is included along with statistics. The authors conclude by stating that Norway and Denmark have structured their laws and organizations differently where video surveillance is concerned.

Williams, Katherine S. and Craig Johnstone. "The Politics of the Selective Gaze: Closed Circuit Television and the Policing of Public Space" Crime, Law & Social Change. 34.2 (2000): 183 – 210.

This article examines how CCTVs are used to exclude certain groups for the benefit of others. The author states that CCTVs may shift from crime control to maintenance of public order as they have little or no lasting impact on crime. There are preventative effects to CCTV in the areas of property crime such as burglary and vandalism, but there is little effect on personal crime. The author notes that the use of cameras may induce a state conscious and permanent visibility where controlling an individual is done as a reflex action. CCTVs can also assure preferred customers that people who are viewed as unseemly are excluded. Selective exclusion is being applied to public space; it is cleansed, purified and made safe. CCTV operators target those areas of the public that are deemed as deviants or outsiders. This can include drunks, beggars, the homeless, and street traders. The author raises the question as to whether or not CCTVs really protect the community or are just a tool for the police to control public space and certain individuals. The enjoyment of one group of people is enhanced at the exclusion of others.

Conclusion

Based upon the available literature, it would seem that the number of CCTV evaluations is still limited. Further studies on the effectiveness of CCTV are forthcoming in the United Kingdom. In addition, those evaluations which have a more positive attitude towards the effectiveness of CCTVs tend to have been conducted by the local police department. The local police department is often the very institution which initially lobbies for the installation of cameras within a given city or neighborhood. As suggested by some of the literature, the police may have a need to justify the cost of installing cameras. Aside from the police, many businesses often lobby for the installation of CCTVs. In the United Kingdom, there are a number of CCTV schemes which are partnerships between government and local businesses. These CCTV schemes often seek to create the proper atmosphere for families and consumers. Positive CCTV evaluations may be a form of self-aggrandizement whether installed by the police or a private body.

While CCTV evaluations carried out by the police tend to be more positive in their findings, those conducted by independent observers often have a less positive attitude towards the effectiveness of cameras in public. The statistics which independent observers provide would suggest that CCTVs reduce crime by only a very small margin. In some cases, crime actually increased. The effectiveness of CCTV varied from one area to the next. When cameras did proved effective, publicity was required in order to maintain the continued effect. Burglary and vehicle theft were the areas most affected by the presence of cameras. CCTV had little to no effect on personal crime, violent crime and public disorder. Diffusions of benefits and displacement of crime could take place and depended upon the area under surveillance.

Many researchers felt that CCTV was more effective when used in combination with other crime prevention measures. They also noted that overwhelming public support was based upon erroneous information regarding CCTVs and their use. This might change as facial recognition technologies improve and CCTVs are linked to facial image databases. The ability to use cameras to identify individuals, and especially terrorists, whose images are stored in a database, appears to be a likely development in the post-September 11th era. Cameras that can identify suspicious movements within a crowd are also a possibility. In the United Kingdom, the use of CCTV by private individuals who use the technology to monitor their walkways is likely to increase as well. Visitors to a home might have their face and movements videotaped before being granted access. Using CCTV within the home is another possibility which has been suggested by proponents in the United Kingdom. CCTV might be used to view the inside of a senior's home by either family or private agencies to ensure the older individual is safe and healthy, and not in need of aid. CCTV has been used in daycares where parents may monitor their child's care and activities via the Internet.